

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-A

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES
PURSUANT TO SECTION 12(b) OR (g) OF THE
SECURITIES EXCHANGE ACT OF 1934**

MEDICINOVA, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation
or organization)

33-0927979
(I.R.S. Employer
Identification No.)

4350 La Jolla Village Drive, Suite 950, San Diego, California 92122
(Address of principal executive offices) (Zip Code)

If this Form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box.

If this Form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box.

Securities Act registration statement file number to which this form relates: 333-119433

Securities to be registered pursuant to Section 12(b) of the Exchange Act:

**Title of Each Class
to be so Registered**

None

**Name of Each Exchange on Which
Each Class is to be Registered**

None

Securities to be registered pursuant to Section 12(g) of the Exchange Act:

Common Stock, \$0.001 par value per share
(Title of Class)

Item 1. Description of Registrant's Securities to be Registered.

In response to this item, incorporated by reference is the description of the Common Stock, \$0.001 par value per share (the "**Common Stock**"), of MediciNova, Inc. (the "**Registrant**") contained under the caption "Description of Capital Stock" in the Prospectus (Subject to Completion) that forms a part of the Registrant's Registration Statement on Form S-1 (File No. 333-119433 filed on September 30, 2004) (the "**Registration Statement**"), together with the description contained under such caption included in any amendment thereto (including, without limitation, any post-effective amendment filed pursuant to Rule 462(b) of the Securities Act of 1933) and in the form of any final prospectus (the "**Prospectus**") subsequently filed by the Registrant pursuant to Rule 424(b) or included in any post-effective amendment to the Registration Statement filed pursuant to Rule 462(b) of the Securities Act of 1933, which prospectus is incorporated by reference herein.

Item 2. Exhibits.

The following exhibits are filed as a part of this Registration Statement:

<u>Number</u>	<u>Exhibit</u>
3.1	Certificate of Incorporation of the Registrant (in effect) (incorporated herein by reference to Exhibit 3.1 of the Registration Statement).
3.2	Form of Restated Certificate of Incorporation of the Registrant (to be effective upon the date of the Prospectus) (incorporated herein by reference to Exhibit 3.2 of the Registration Statement).
3.3	Bylaws of Registrant (in effect) (incorporated herein by reference to Exhibit 3.3 of the Registration Statement).
3.4	Form of Amended and Restated Bylaws of the Registrant (to be effective upon the date of the Prospectus) (incorporated herein by reference to Exhibit 3.4 of the Registration Statement).
4.1	Form of Common Stock Certificate (incorporated herein by reference to Exhibit 4.1 of the Registration Statement).

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereto duly authorized.

Dated: January 25, 2005.

MEDICINOVA, INC.

By _____ /s/ TAKASHI KIYOIZUMI
Takashi Kiyozumi, M.D., Ph.D.
President and Chief Executive Officer

INDEX TO EXHIBITS

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